Evaluation Report

"Regal Decks Fiberglass Roofing"

Roof Underlayment

Manufacturer:

Regal Decks, Inc.

739 Natalie Lane
Palm Harbor, FL 34683

for

Florida Product Approval

FL 7549.1 R8

Florida Building Code 9th Edition (2026)

Method: **1 - D**
Category: **Roofing**
Sub - Category: **Waterproofing**

Product: Regal Decks Fiberglass Roofing
Material: Fiberglass

Prepared by:
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Florida Evaluation ANE ID: 1916
Project Manager: Diana Galloway
Report No. 26-817-RDFR-ER
(Revises 23-579-RDFR-ER, FL7549.1 R7)
Date: 8/17/2026

This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.

JAMES L. BUCKNER
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STATE OF FLORIDA
PROFESSIONAL ENGINEER

James L. Buckner, P.E.
FL31242
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Manufacturer:
Regal Decks, Inc.
739 Natalie Lane
Palm Harbor, FL 34683
http://www.regaldecksinc.net/

Product Name: **Regal Decks Fiberglass Roofing**

Product Category: Roofing

Product Sub-Category Waterproofing

Compliance Method: State Product Approval Rule 61G20-3.005 (1) (d)

Product Description: Fiberglass Roof Membrane bonded to Wood Deck.

Product Assembly as Evaluated: Refer to Page 4 of this report for product assembly components/materials & standards:

1. Fiberglass Mat
2. Polyester Resin
3. Gel Coat
4. Quickcrete sand

Support:

Type:
Wood Deck
Moisture content of wood deck shall not exceed 18 %.
(Design of support system is outside the scope of this evaluation.)

Description:
- 3/4 or greater plywood,
- or Wood plank

Slope: 1/4 : 12 or greater
Minimum slope shall be in compliance with FBC Chapter 15 based on the type of roof covering, applicable code sections and in accordance with manufacturer's recommendations.

Performance: Wind Uplift Resistance:
- Design Uplift Pressure: **- 150 PSF**
  (Refer to "Table A" attachment details herein)

Performance Standards: The product described herein has demonstrated compliance with:

- FM 4474-20, Appendix "D" – *Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures*
- ASTM E 96, *Test Method for Water Vapor Transmission of Materials*
- ASTM G 53 – *Practice for Operating Light and Water Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.*

Standards Equivalency: The TAS 114, Appendix "D" standard version used to test the evaluated product assembly is equivalent with the intent of the prescribed standards in FM 4474-20, Appendix "B" for this product evaluation as adopted by the Florida Building Code 9th Edition (2026).

Code Compliance: The product(s) described herein have demonstrated compliance with the performance standards listed above as referenced in the:
Florida Building Code 9th Edition (2026)

Evaluation Report Scope: This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.

Limitations and Conditions of Use:

<u>Scope of "Limitations and Conditions of Use" for this evaluation:</u>
This evaluation report for "Optional Statewide Approval" contains technical documentation, specifications and installation method(s) which include "Limitations and Conditions of Use" throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under "Optional Statewide Approval".

- This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUCK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.
- Design of support system is outside the scope of this report.
- Fire Classification is outside the scope of Rule 61G20-3 and is therefore not included in this evaluation.
- This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)

<u>Option for application outside "Limitations and Conditions of Use"</u>
Rule 61G20-3.005(1)(e) allows engineering analysis for "project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code". Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.

Quality Assurance: The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.0005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Timber Products Inspection, Inc. (QUA. System ID: 1963)

Components/Materials (by Manufacturer):

Fiberglass Mat:
Chopped strand mat, standard strand reinforcement made from cut fibers laid in a random pattern and bonded with a powdered, highly soluble resin binder.
Standard Weight: 1 ½ oz. / sq.ft.

Binder Material:

Material:	Polyester Resin
Thickness:	62 mils wet

Typical Properties	**Results**	**Test Method**
Hardness Barcol:	31	ASTM D 2583
Tensile Strength:	6500 psi	ASTM D 638
Flexural Strength:	12500 psi	ASTM D 790
Flexural Modulus:	4.6×10^5 psi	ASTM D 790
Heat Distortion Temp. (HDT):	150° F	ASTM D 648

Top Surface Material:

Type:	Exterior Gel Coat
Thickness:	25 mils wet

Typical Properties	**Results**	**Test Method**
Weight Per Gallon	10 – 12 lbs	
Type:	34	ASTM D 2583

Texture Material:

Type:	Quickcrete commercial sand

Installation:

Installation Method:

(Refer to drawing on Page 6 of this evaluation report.)

- Product to be applied directly to a clean dry surface. Dust, dirt, oil, grease, moisture, debris and other loose materials or contaminants must be removed prior to application.
- Moisture content of wood deck shall not exceed 18%.
- Air space below deck shall have ventilation.

1. Fiberglass chop strand mat is laid out over deck, extending 6-8 inches up wall flashing.
2. Apply polyester resin over fiberglass mat. (One gallon of resin per 30 ft^2 of deck or per manufacturer's recommendations)
3. Allow lamination to set per manufacturer's recommendations.
4. Apply Gel Coat (25 wet mils) textured with one cup of fine sand per 100 ft^2 of deck.
5. Allow final Gel Coat to cure for one week.

Install the roof panel assembly in compliance with the installation method listed in this report and applicable code sections of FBC 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

Referenced Data:

1. TAS 114-95, Appendix D
   By PRI Asphalt Technologies (TST ID: 1556)
   Report # RDI-002-02-01, Report Date: 8/15/06

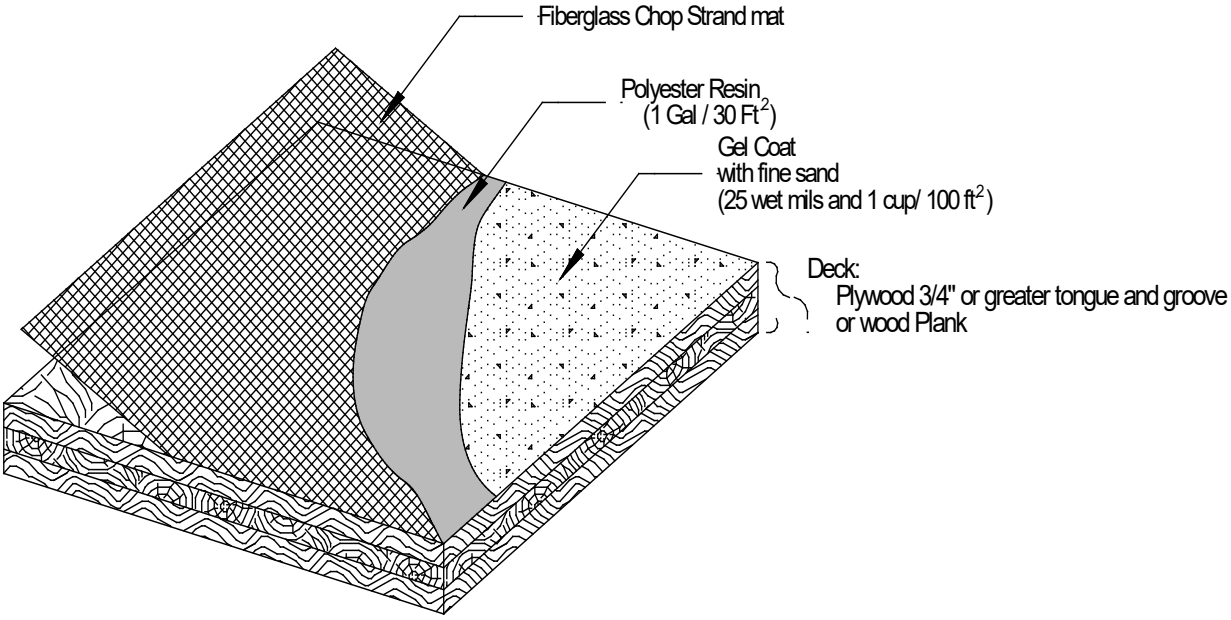
2. ASTM E 96 – Weather Vapor Transmission
   ASTM G 53 – Operating Light- and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.
   By PRI Asphalt Technologies (TST ID: 1556)
   Report # RDI-001-02-01, Report Date: 9/16/02

3. Equivalency of Test Standard Certification
   By James L. Buckner, P.E. @ CBUCK Engineering
   (FBC Organization # ANE 1916)

4. Quality Assurance
   By Timber Products Inspection, Inc. (QUA. System ID: 1963)

5. Certification of Independence
   By James L. Buckner, P.E. @ CBUCK Engineering (ANE ID: 1916)

Installation Method
Regal Decks, Inc.
Fiberglass Roofing Bonded to Wood Deck



Typical Isometric
Assembly View